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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/853,054	05/10/2001	Jamie A. Hern	56684US002	7349

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EXAMINER

JOHNSON, EDWARD M

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 07/17/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/853,054

Applicant(s)

HERN ET AL.

Examiner

Edward M. Johnson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 7-15 is/are rejected.
- 7) ☒ Claim(s) 4-6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 May 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4-6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because the lone figure is labeled "Fig. 1", which should be deleted, since it is the only figure in the Application. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: the figure is referred to as "Fig. 1", which should be replaced with --the figure--, since there is only one figure in the Application.

Appropriate correction is required.

Claim Objections

3. Claim 1 is objected to because of the following informalities: in line 3, "media particles;" appears to be incorrect. Examiner suggests --media particles; and--.

Appropriate correction is required.

4. Claim 6 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the

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claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3 and 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Goose et al. US 4,531,953.

Regarding claims 1 and 15, Goose '953 discloses a method of making an absorbent comprising: (a) impregnation of activated carbon with an amine compound by sublimation into the activated carbon (abstract), and (b) contacting the carbon with the amine in the gas phase (see column 2, lines 44-68 and column 3, lines 1-8) while heating (see column 2, lines 55-58).

Regarding claim 2, Goose '953 discloses amine (abstract).

Regarding claims 3 and 13, Goose '953 discloses 1.5 percent organic impregnant (see column 3, lines 45-47).

Regarding claim 14, Goose '953 discloses copper (see claim 2).

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7. Claims 1-3, 7-8, and 10-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Liang et al. US 5,462,908.

Regarding claims 1 and 15, Liang '908 discloses a method of making impregnated carbon comprising sublimation of amine and diffusion of the amine molecules to the carbon surface and into the pores at elevated temperatures (see column 3, lines 50-63).

Regarding claims 2 and 8, Liang '908 discloses sublimation or vaporization of amines (column 3, lines 50-63).

Regarding claims 3 and 13, Liang '908 discloses 7% loading (see column 6, lines 50-53).

Regarding claim 7, Liang '908 discloses 400 mL of water (4g) to 440 grams of carbon (see column 5, lines 35-37 and 40-42).

Regarding claim 10, Liang '908 discloses adding to carbon and completion in $\frac{1}{2}$ to $\frac{3}{4}$ hour (see column 5, lines 15-18).

Regarding claims 11-12, Liang '908 discloses a vacuum oven for up to 16 hours (see column 5, lines 20-21).

Regarding claim 14, Liang '908 discloses copper (see column 5, lines 31-34).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Liang '908 as applied to claim 7 above, and further in view of Goose '953.

Liang '908 fails to disclose an atomized spray.

Goose '953 discloses spraying onto the surface with a nozzle spraying device.

It is considered that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the spraying device of Goose in the breathing absorbent of Liang because Goose discloses his spraying device in a process for making an breathing absorbent in gas masks to remove cyanogen chlorides over longer periods (see column 1, lines 7-13 and 60-62) and Liang specifically references the teachings of Goose as relevant prior art (see references cited and column 1, lines 40-46).

Allowable Subject Matter

10. Claims 4-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in

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independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter: It would not have been obvious to one of ordinary skill in the art at the time the invention was made to use an amine comprising both TEDA and piperazine in the method of the instant claim 4.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Groeger et al. US 5,952,092 discloses a method of making fibrous filters comprising depositing a labile active substance in the pores and surface cavities (see abstract and claims).

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward M. Johnson whose telephone number is 703-305-0216. The examiner can normally be reached on M-F 6:30-4:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman can be reached on 703-308-3837. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

EMJ

July 14, 2003



STANLEY S. SILVERMAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700